

ABSTRACT

A coding section 101 turbo-codes transmit data and outputs parity bit data, and systematic bit data for which
5 good quality is required. A modulation section 102 modulates the parity bit data and systematic bit data. A subcarrier allocation section 103 rearranges the transmit data so that systematic bit data is allocated to subcarriers in the vicinity of the center frequency
10 and parity bit data is allocated to subcarriers in the vicinity of both ends. An OFDM section 104 performs orthogonal frequency division multiplexing of the transmit data, and allocates parity bit data and systematic bit data to respective subcarriers. By this
15 means, it is possible to improve significantly the error rate characteristics of transmit data for which good quality is required, and prevent degradation of the quality of transmit data for which good quality is required.